DYNAMIC PSYCHOLOGY. By Robert Sessions Woodworth, Ph. D. Columbia University Press, New York, 1918. Pp. 210. Price $1.50.

Professor Woodworth begins this revision and enlargement of his Jesup Lectures for 1916-1917 by presenting a brief description of the many streams of thought and investigation that have united to form the modern movement of psychology. As one of the oldest, most independent, and influential of the original sources from which this movement has developed, he would place abnormal or pathological psychology, as illustrated by the early work of Pinel and the modern contributions of such men as Binet. He concludes that "brass instrument psychology," to use an expression of William James, is but a small and overemphasized part of the whole modern movement in this science.

In a lecture on "The Problems and Methods of Psychology" the extreme behaviorist is criticised for wishing to exclude a legitimate method and object of study and, on the other hand, the extreme introspectionist who would exclude the study of behavior by objective methods is considered equally at fault. Both methods of attack have yielded rich results. It is a question of emphasis. In reality, much of the experimental work done from the time of Fechner to the present has really been on human behavior and only incidentally, if at all, on consciousness. If certain secondary criteria are excluded, there is practically no difference between the simpler forms of introspection and ordinary objective observation. However, according to Professor Woodworth, the description of consciousness from the introspective or behavioristic point of view is not the real aim of the workers in this science. From Locke, Berkeley, and Hume, to the present-day workers "the actual interests of psychologists, as revealed by the problems taken up, have centered on the problem of cause and effect," *i. e.*, dynamics, the same phase that interests the beginner in psychology. Consciousness and behavior, separately or together, do not provide a coherent system for the casual treatment of the mental side of vital activity.

For dynamic psychology there are two problems, that of "mechanism" and "drive,"—how is a thing done, and what causes it to be done? While "drive" or "motive" is usually considered as something external, Professor Woodworth, by employing the physiological facts of reinforcement and inhibition, prepares the way for a conception of inner motive. Reinforcement and inhibition show to him conclusively that one nerve center is able to furnish drive for another. "Thus, though the drive for nerve activity may be ultimately external, at any one moment there are internal sources of influence furnishing drive to other parts of the system." Therefore, "drive" is not essentially distinct from "mechanism," and it is argued that any mechanisms, particularly those directed towards consummatory reactions, come to act as drives.

In the third lecture or chapter, "Native Equipment of Man," which is perhaps most characteristic of this contribution to dynamic psychology by Professor Woodworth, native equipment is held to include "aptitudes or 'gifts' for certain activities, or for dealing with certain classes of things." These native capacities

are set off from instincts in that they do not have ready-made reactions to stimuli. Hence these mechanisms are only gradually developed through the experience and learning of the individual. Professor Woodworth stresses the important driving powers of these mechanisms developed on natural capacities of the individual for dealing with certain classes of objective material, *e. g.*, machinery, mathematics, and music, and would list them as belonging to the prime movers of human action, contrary, he thinks, to the commonly accepted view of motivation. In fact, he states that the definite aim of this book is to show how such mechanisms are powerful drives and that any mechanism, once it is aroused, is capable of furnishing its own drive and also of lending drive to other connected mechanisms, and this wholly aside from the "overhead power system of the instincts." Incidentally, this point of view leads him to insist that the organism is not naturally inert to the high degree signified by certain psychopathologists.

In lectures on "Acquired or Learned Equipment," "The Factor of Selection and Control," and "The Factor of Originality," Professor Woodworth further develops his conception of drive. It is wholly impossible for him to believe that the industry of the genius is driven from hunger or sex or rivalry or any of this class of prime movers. The attitude of play characteristic of genius is cited as demonstrating that the activity contains the drive within itself.

Experimental psychology has treated of mechanisms more than of drives. On the contrary, psychopathology concerns itself more with drive than with mechanism. Consequently the author finds much in "abnormal behavior" that is of importance for his view of motivation. The feeble minded are not only lacking in drive but also in mechanism, and since these are not fundamentally different, if they can be taught mechanism, they will thus be provided with motivation. The delusion of the paranoiac, initiated by some normal (instinctive) drive, becomes crystallized through the process of trial and error and comes to act as a drive, on its own account facilitating and inhibiting actions and perceptions that would otherwise be possible but not probable.

The author finds many reasons for disagreeing with the Freudian psychology and carefully criticises its conceptions of suppression and sublimation. Although regarding the sex impulse as a prime mover, he is convinced that if this impulse alone were in action, the resulting behavior of the organism would usually be much more direct. Many social amusements undoubtedly draw the sex motives into their service to add spice to play, but without other drives even the amusement of dancing would not exist. Since this is true of behavior that is obviously sexual, or may be given such an interpretation, "it can scarcely be less true in behavior that seems to be fundamentally driven by quite other motives." If the mechanisms developed by the abnormal individual, whether genius or insane, thus prove capable of supplying drive in and of themselves, it would seem that it is characteristic of all mechanism whether with abnormal or normal individuals that they should become drives, and consideration of them as such is, he believes, of greatest importance for dynamic psychology.

This nicely made and very acceptable volume by Professor Woodworth is written in a charming style; it has been rendered convenient by references and index, and will provide a useful auxiliary text for courses introducing general psychology.

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HUMAN PSYCHOLOGY. By Howard C. Warren, Stuart Professor of Psychology, Princeton University. Houghton Mifflin Co. Boston, New York and Chicago, 1919. Pp. xx, 460; figs. 68. Price, $2.75 net.

By way of philosophic contrast, the professor at Princeton has given the world a text-book of psychology "with a soul" or at least a mind—a mere detail which Professor Watson's materialistic system tries to do without, as we have just seen above. The difference in the two views (and the matter is suggestive of the failure of the master-behaviorist's definition of psychology) is expressed by two sentences (from page 29): "Mental life consists in the adaptations of an organism to changing conditions of its environment, and the processes which bring about these adaptations constitute experience. Experience includes behavior and consciousness—behavior being the action of the creature upon his environment, and consciousness an effect of environment on the creature." What further could be sought for or declared? The organization of organisms is two fold, vital and mental, the latter including among other functions, rational action; in man mental life "may even replace the vital life as the chief factor of his existence." In the very humble opinion of the reviewer this attitude represents the rational ultima Thule of the infection (by no means an epidemic) with the Bacillus behavioristicus.

The twenty-three chapters (four in the appendix) of this excellent text by the well-konwn editor of the *Psychological Review* are titled as follows: The science of psychology; the organism; the neuro-terminal mechanism; physiology of the neuron; stimulation, adjustment, and response; behavior, (two chapters); conscious experience; the senses (two chapters); the components of mental states; primary mental states (two chapters); secondary mental states, (two chapters); succession of mental states; attitudes; character and personality; organized mental life; the mind-body relation; mechanism and purpose; neural activity; and the visual process. Directions for performing the exercises. Index (adequate because detailed). Twenty-three "tables" add greatly to the value of the book because they are systematizers and therefore fixers of the learner's concepts: "Classification of science; vital and mental functions; human reflexes; human instincts; instinctive tendencies of man; progress of learning; fundamental operations of conscious experience; spectral lines and color range; complementary colors ; classes of odors; threshold of intensity for taste; classification of the senses; classes of mental states; values of the Weber constant; secondary mental states; human emotions; classification of sentiments; classes of associations; human attitudes; human dispositions; higher human attitudes; classification of temperaments; and visual phenomena."